

5 a spiral inductor coupled between said inner conductor and a ground
6 connection, said spiral inductor operating at a predefined RF impedance to propagate said
7 signals along said inner conductor during normal operations and to dissipate electrical energy
8 to said ground connection during a surge condition.

1 23. (Amended) [The surge suppressor of claim 1, further comprising]

2 A surge suppressor comprising:

3 an inner conductor for conducting signals;

4 a spiral inductor coupled between said inner conductor and a ground

5 connection, said spiral inductor operating at a predefined RF impedance to propagate said

6 signals along said inner conductor during normal operations and to dissipate electrical energy

7 to said ground connection during a surge condition; and

8 a surge blocking device coupled to said inner conductor and said spiral inductor
9 for attenuating said electrical energy therethrough.

1 64. (Amended) [The surge suppressor of claim 1, further comprising]

2 A surge suppressor comprising:

3 an inner conductor for conducting signals;

4 a spiral inductor coupled between said inner conductor and a ground

5 connection, said spiral inductor operating at a predefined RF impedance to propagate said

6 signals along said inner conductor during normal operations and to dissipate electrical energy

7 to said ground connection during a surge condition; and

8 a surge blocking means coupled to said inner conductor and said spiral inductor
9 for blocking said electrical energy therethrough.

1 5. (As Filed) The surge suppressor of claim 3 wherein said inner
2 conductor and said surge blocking device are disposed within a cavity of a housing, said inner
3 conductor and said cavity forming a coaxial line.

1 6. (As Filed) The surge suppressor of claim 3 wherein said surge blocking
2 device comprises first and second plates and first and second transitions collectively forming a
3 structure having a predefined impedance.

1 7. (As Filed) The surge suppressor of claim 3 wherein said surge blocking
2 device is selected from a group consisting of a capacitor, parallel rods, coupling devices, and
3 conductive plates.

1 7/8. (Amended) [The surge suppressor of claim 1 wherein]
2 A surge suppressor comprising:
3 an inner conductor for conducting signals; and
4 a spiral inductor coupled between said inner conductor and a ground connection
5 and operates at a predefined RF impedance to propagate said signals along said inner
6 conductor during normal operation and to dissipate electrical energy to said ground connection
7 during a surge condition, said spiral inductor [has] having a shape selected from a group
8 consisting of archemedes, logarithmic, and hyperbolic.

1 9. (Allowed) A surge suppressor for discharging an electrical surge to
2 ground comprising:
3 a housing having a cavity, a surge port, and a protected port;
4 an inner conductor disposed within said cavity of said housing for transmitting
5 and receiving radio frequency signals;
6 a spiral inductor disposed within said cavity of said housing, said spiral inductor
7 having an inner spiral electrically coupled to said inner conductor and an outer spiral
8 electrically coupled to said housing for discharging electrical energy to a ground connection;
9 and
10 a capacitive device disposed within said cavity of said housing and electrically
11 coupled to said inner conductor and said spiral inductor for attenuating said electrical energy
12 therethrough.

1 10. (Allowed) The surge suppressor of claim 9, further comprising an
2 insulating member disposed within said cavity of said housing and coupled to said inner
3 conductor for supporting said inner conductor in said cavity to electrically isolate said inner
4 conductor from said housing.

1 11. (Allowed) The surge suppressor of claim 9 wherein said capacitive
2 device comprises first and second plates and first and second transitions collectively forming a
3 structure having a predefined impedance.

1 12. (Allowed) The surge suppressor of claim 9 wherein said inner
2 conductor and said cavity forming a coaxial line.

1 13. (Canceled).

1 14. (Canceled).

1 15. (Canceled).

1 16. (Canceled).

1 17. (Allowed) A communications system comprising:
2 communications equipment coupled to an antenna for receiving and
3 transmitting signals via an inner conductor; and
4 a surge suppressor for blocking excessive electrical energy developed at said
5 antenna or on said inner conductor during a surge condition, the surge suppressor comprising:
6 a spiral inductor coupled between said inner conductor and said ground
7 connection, wherein said spiral inductor operates at a predefined RF impedance to propagate
8 said signals along said inner conductor during normal operation and to dissipate said electrical
9 energy to a ground connection during said surge condition.

1 18. (Allowed) The communications system of claim 17 wherein said surge
2 suppressor further comprising a capacitive device coupled to said spiral inductor for
3 attenuating said electrical energy.

1 19. (Allowed) The communications system of claim 17 wherein said surge
2 suppressor further comprising a housing having a cavity configured to dispose said spiral
3 inductor therein.

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